Before the
Federal Communications Commission
Washington DC 20554

In the Matter of	)	
	)	
	)	
Petition for Rulemaking to Amend and	)	
Modernize Parts 25 and 101 of the	)	
Commission's Rules to Authorize and Facilitate	)	RM–11791
the Deployment of Licensed Point-to-Multipoint	)	
Fixed Wireless Broadband Service in the 3700 –	)	
4200 MHz Band	)	
	)	
	)	

COMMENTS OF THE
NATIONAL SPECTRUM MANAGEMENT ASSOCIATION

The National Spectrum Management Association ("NSMA")[1] submits these comments regarding the Petition for Rulemaking by the Broadband Access Coalition ("BAC") in the above-captioned proposed rulemaking.

A. INTRODUCTION

The BAC requests that the Commission create a new Subpart K to the Part 101 rules to authorize a new point-to-multipoint fixed wireless service in the 3700-4200 MHz band for the purpose of providing high speed internet service to rural and underserved areas. This service is proposed as co-primary to the existing FS point-to-point applications and fixed satellite applications that are currently authorized in this band. The BAC makes clear in their request that both fixed point-to-point and fixed satellite operations should be allowed to continue in this band and that their petition does not seek to replace those services.

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[1] The NSMA is a voluntary association of individuals involved in the spectrum management profession including service providers, manufacturers, frequency coordinators, engineers and consultants. NSMA's goal is to promote rational spectrum policy through consensus views formulated by representatives of diverse segments of the wireless industry.

B. Existing Conditions

The Commission proposes granting UMFUS flexible use mobile rights to existing fixed licensees. This BAC petition notes that there are only 118 point-to-point fixed stations authorized across the entire United States and it clearly identifies some of reasons for this underutilization. The "full-band, full-arc" licensing practice for satellite earth stations is noted along with the large percentage of earth stations that have been abandoned or are no longer in use that must be accounted for in the coordination process since they are still licensed. Both issues were also previously noted by the Fixed Wireless Communications Coalition ("FWCC") in a request to the commission made earlier this year (footnote needed). Another major reason for the underutilization of fixed links in the band is the limited channel size (currently only 20 MHz channels are authorized) and the very small and inconsistent separation between the transmit and receive frequencies (T/R separation). The T/R separation is a large issue that greatly increases the equipment cost. Both of these channel plan issues render the band much less desirable than 6 GHz and explain the avoidance of this band by most licensees and equipment manufacturers. The FWCC has proposed a re-channelization plan for the band (insert footnote) that would correct these flaws in the current rules. The NSMA conditionally supports the BAC petition, provided the existing point-to-point channel plan is updated to allow for future point-to-point use of the band.

C. Sharing Possibilities

The BAC petition is a proposal that promises to bring high-speed internet to millions of Americans for the first time. We agree that it is a very good use for a band that had been underutilized for many years. However, we believe that this is only part of the picture. Currently 6 GHz point-to-point microwave is used to provide connectivity to many rural areas. Existing 6

GHz microwave links are currently at capacity and 4 GHz is the only other suitable part 101 band available. We believe that sharing is possible between the three services, but note that sharing will not really occur in the band until the Part 101 channel plan is made useable for point-to-point microwave and equipment for the band is available and affordable.

D. Support for Existing Services

We support the BAC and FWCC requests to reform the current "full-band, full-arc" licensing practice for FSS earth stations and their requests for the Commission to require FSS licensees to update the IBFS database as soon as possible.

The current satellite services in the 3700-4200 MHz ("C") band include a wide range of commercial (and government) users. These services have different coordination and protection needs. They must be protected and allowed to expand service. The interference analysis and coordination process should be the mechanism for protecting the incumbent stations. If the analysis is conservative enough and the current licenses participate in the coordination process (either directly or through their protection agents) the risk of interference should be minimum.

Some inherent incompatibilities in the petition must be addressed. Appropriate coordination procedures for coordination between point-to-point and point-to-multipoint systems do not currently exist. Part 101 coordination is not effective for service area authorizations as proposed in the petition. Effective Part 101 coordination requires use of antenna directionality on a link-by-link basis. Mutual exclusivity could result from overlapping service areas and channels. NSMA supports coordination on a link-by-link basis or some other method that avoids mutual exclusivity instead of creating it.

We support the extension of the Part 101 coordination process to the new PTMP services in this band, however we do not agree with BAC concerning their planned transition to an

automated frequency coordination system (Spectrum Access System or SAS). Their proposal also seems to be at cross-purposes on this issue, stating on page 27 that "an SAS for sharing among fixed users is unnecessary" but on the next page indicating that "ultimately the existing coordination procedures should be replaced by an automated process." Note that in support for an automated process they state that automation will improve frequency coordination by mitigating the potential for human error. As the coordinator members of our organization can attest, the human error introduced in the coordination process is usually caused by the input (bad equipment data, coordinate data, elevation data, etc.). These errors will exist with or without humans involved in the coordination process and without coordination no one will catch the errors that are introduced. We concur with the BAC that an SAS or automated coordination process is unnecessary at this time and believe that arguments for or against that should be left for another day and a different proceeding.

E. Coordination Enhancements

We disagree that the current rules for FS frequency coordination are a "bad fit" for the new P2MP service. Coordination requires notification and response and many times there is considerable back and forth between the parties. An attempt to codify an expedited process for this will surely lead to many more petitions requesting the FCC resolve the unresolved issues between parties. In our opinion, the coordination process in the band would be more complicated than a standard point-to-point coordination, not less. We are not opposed to considering ways to speed up the process, however this should be part of a broader proceeding. We believe that the coordination procedures should be the same for all Part 101 microwave bands.

We also disagree with the proposal to coordinate devices outside the service area on a path-by-path basis and maintain paths on a path-by-path basis if construction requirements are not met. Unless additional information or clarification is provided, we believe this would unnecessarily restrict other uses of these frequencies and would not be spectrally inefficient.

CONCLUSION

Overall NSMA supports efforts by the FCC to increase spectrum efficiency. One of the best things about this approach is that very few rule changes are involved and the changes required can be implemented quickly. Note that requested updates to the Part 25 licensing process are important but not necessary to begin coordination for this service. The service can be authorized almost immediately and the other rule changes can work their way through the process. NSMA stands ready to help develop coordination and licensing rules and procedures for effective sharing among multiple licensees.

We request that the FCC keep this request separate from GN Docket No.17-183, "Expanding Flexible Use in MidBand Spectrum Between 3.7 and 24 GHz.". This is a huge opportunity to bring high-speed internet to millions of Americans and should not be delayed. NSMA looks forward to working with the BAC and other stakeholders to formulate the interference analysis requirements and refine the coordination procedures.

Respectfully submitted,

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August 7, 2017